

XP-002251219

AN - 1996-017235 [02]

AP - JP19940107933 19940422

CPY - KURS

DC - A14 A17 A93 A96 A97 C07 D22

DR - 0446-S 0446-U 0460-S 0460-U 0654-S 0654-U 0843-S 0843-U 0901-S 0901-U
0902-S 0902-U 0966-S 0966-U 1621-S 1621-U

FS - CPI

IC - C08F8/00 ; C08J3/24 ; C08L35/00

MC - A04-A A04-D04 A04-F04 A04-F05 A07-A02 A09-A08 A11-C02 C04-C03B C14-T01
D09-C02M1 - [01] C316 H7 H714 H721 J0 J011 J3 J371 K0 K3 K351 M210 M212 M262 M281
M320 M423 M431 M782 M903 M904 P126 Q132 R041 V743; 9602-64601-M
9602-64601-Q- [02] H7 H713 H721 K0 K4 K431 M210 M212 M271 M281 M320 M423 M431 M510
M520 M530 M540 M782 M903 M904 P126 Q132 R041 V743; R24011-M R24011-Q- [03] H7 H721 M210 M214 M232 M320 M416 M423 M431 M610 M782 M903 M904
M910 P126 Q132 R041 V743; R00966-M R00966-Q; 0966-S 0966-U- [04] H7 H721 J0 J012 J1 J172 M280 M312 M321 M332 M342 M382 M391 M416
M423 M431 M782 M903 M904 M910 P126 Q132 R041 V743; R00902-M R00902-Q;
0902-S 0902-U- [05] H7 H721 J0 J011 J1 J171 M210 M213 M231 M262 M281 M320 M416 M423
M431 M782 M903 M904 M910 P126 Q132 R041 V743; R01621-M R01621-Q;
1621-S 1621-U- [06] H7 H721 J0 J012 J1 J172 M280 M313 M321 M331 M342 M382 M391 M416
M423 M431 M782 M903 M904 M910 P126 Q132 R041 V743; R00654-M R00654-Q;
0654-S 0654-U- [07] H7 H714 H721 J0 J011 J1 J171 M210 M212 M262 M281 M320 M416 M423
M431 M782 M903 M904 M910 P126 Q132 R041 V743; R00446-M R00446-Q;
0446-S 0446-U- [08] H7 H721 J0 J011 J1 J171 M210 M213 M232 M262 M281 M320 M416 M423
M431 M782 M903 M904 M910 P126 Q132 R041 V743; R00460-M R00460-Q;
0460-S 0460-U- [09] H7 H721 J0 J012 J1 J172 M280 M312 M321 M332 M342 M382 M391 M416
M423 M431 M782 M903 M904 M910 P126 Q132 R041 V743; R00901-M R00901-Q;
0901-S 0901-U- [10] F012 F015 F112 J5 J522 L9 L930 M280 M320 M413 M423 M431 M510 M521
M530 M540 M782 M903 M904 M910 P126 Q132 R041 V743; R00843-M R00843-Q;
0843-S 0843-U

PA - (KURS) KURARAY CO LTD

PN - JP7292023 A 19951107 DW199602 C08F8/00 004pp

PR - JP19940107933 19940422

XA - C1996-005617

XIC - C08F-008/00 ; C08J-003/24 ; C08L-035/00

AB - J07292023 Resin obtd. by crosslinking (I) a salt made from an
alternating copolymer of isobutylene and maleic anhydride and an
alkali substance and (II) a copolymer of acrylic acid amide with an
alpha, beta-unsatd. cpd. contg. at least one carboxyl or sulphone gps.

- The unsatd. cpd. is pref. acrylic acid, methacrylic acid, maleic anhydride, maleic acid, itaconic acid, crotonic acid, fumaric acid, acrylamidesulphonic acid or vinylsulphonic acid. The mol. ratio of acrylic acid amide (A)/alpha, beta-unsatd. cpd. (B) is 9/1 to 1/9.

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- Mfg. the water-absorptive resin comprises drying and heat treating (I), (II) and crosslinking agent.

- USE/ADVANTAGE - Prod. is used in sanitary napkins, diapers, soil improvers or civil engineering materials e.g. water shielding for an optical fibre cable. Prod. has stable water absorptivity in water, partic. distilled water, sea water and city water (resistant to saline and Cl) and good resistance to wet heat.

- In an example, a salt soln. (1) was prepd. by reacting an alternating copolymer of isobutylene and maleic anhydride (intrinsic viscosity, $\eta_{sp}/c = 1.0$) (20g) and caustic soda (8g) (eg. of neutralisation = 80%) in 72g of distilled water at 90 deg.C for 8 hrs. A uniform soln. was prepd. using a mixt. of the soln. (100g), 100g aq. soln. of a copolymer (8/2 of acrylic acid amide and acrylic acid) in NaOH and 0.1g polyethyleneimine (crosslinking agent). The mixt. soln. was passed onto a roll at 200 deg.C and evaporated water in 10 min. The film was pulverised and dried at 200 deg.C for 1 hr. The prod. resin gave the following results: Absorption of distilled water = 170g/g. Artificial sea water (ASW) absorption = 33 g/g. Wet heat resistance for ASW = 50 days. Stability in ASW = 300 days. (Dwg.0/0)

CN - 9602-64601-M 9602-64601-Q R24011-M R24011-Q R00966-M R00966-Q R00902-M R00902-Q R01621-M R01621-Q R00654-M R00654-Q R00446-M R00446-Q R00460-M R00460-Q R00901-M R00901-Q R00843-M R00843-Q

DRL - 0966-S 0966-U 0902-S 0902-U 1621-S 1621-U 0654-S 0654-U 0446-S 0446-U 0460-S 0460-U 0901-S 0901-U 0843-S 0843-U

IW - HIGH WATER ABSORB RESIN SANITARY NAPKIN OBTAIN CROSSLINK SALT MADE ALTERNATE COPOLYMER ISOBUTYLENE MALEIC ANHYDRIDE ALKALI SUBSTANCE COPOLYMER POLYACRYLIC ALKALI SUBSTANCE COPOLYMER POLYACRYLIC ACID POLYAMIDE

IKW - HIGH WATER ABSORB RESIN SANITARY NAPKIN OBTAIN CROSSLINK SALT MADE ALTERNATE COPOLYMER ISOBUTYLENE MALEIC ANHYDRIDE ALKALI SUBSTANCE COPOLYMER POLYACRYLIC ALKALI SUBSTANCE COPOLYMER POLYACRYLIC ACID POLYAMIDE

NC - 001

OPD - 1994-04-22

ORD - 1995-11-07

PAW - (KURS) KURARAY CO LTD

TI - Highly water absorptive resin used for sanitary napkins, etc. - obtd.

by crosslinking salt made from alternating copolymer of isobutylene and maleic anhydride and alkali substance and copolymer of acrylic] and alkali substance and copolymer of acrylic] acid amide], etc.

A01 - [001] 018 ; R00966 G0055 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D84 ; R00843 G0760 G0022 D01 D23 D22 D31 D42 D51 D53 D59 D65 D75 D84 F39 E00 E01 ; H0022 H0011 ; M9999 M2391 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P1150 ;

- [002] 018 ; ND03 ; B9999 B3407 B3383 B3372 ; Q9999 Q8004 Q7987 ; Q9999 Q9370 ; N9999 N6780-R N6655 ; N9999 N6177-R ; Q9999 Q6768 Q6702 ; Q9999 Q6995-R ; Q9999 Q8344 Q8264 ; K9676-R ; K9483-R ; B9999 B4706-R B4568 ; B9999 B4682 B4568 ;

- [003] 018 ; H0226 ;

A02 - [001] 018 ; R00966 G0055 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D84 ; R00843 G0760 G0022 D01 D23 D22 D31 D42 D51 D53 D59 D65 D75 D84 F39 E00 E01 ; H0022 H0011 ; M9999 M2391 ; M9999 M2379-R ;

- L9999 L2391 ; L9999 L2379-R ; M9999 M2073 ; L9999 L2073 ; P1150 ;
- [002] 018 ; N9999 N6439 ; N9999 N6939-R ; N9999 N6860 N6655 ; N9999 N6144 ;
- [003] 018 ; R01514 D00 D67 F21 H- O- 6A Na 1A ; H0226 ;
- [004] 018 ; Na 1A ; H0157 ;
- [005] 018 ; A999 A157-R ;
- A03 - [001] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; G0022-R D01 D51 D53 O- 6A C- 4A F62 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [002] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00460 G0306 G0271 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D60 D84 F36 F35 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [003] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00446 G0282 G0271 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D60 D83 F36 F35 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [004] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00843 G0760 G0022 D01 D23 D22 D31 D42 D51 D53 D59 D65 D75 D84 F39 E00 E01 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [005] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00901 G0760 G0022 D01 D12 D10 D51 D53 D59 D60 D84 F37 F35 E00 E01 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [006] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00654 G0760 G0022 D01 D12 D10 D51 D53 D58 D60 D85 F37 F35 E00 E03 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [007] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00902 G0760 G0022 D01 D12 D10 D51 D53 D59 D60 D84 F37 F35 E00 E02 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [008] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R24011 G0022 D01 D12 D10 D51 D53 D58 D60 D82 F62 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [009] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; G0453-R G0260 G0022 D01 D12 D10 D26 D51 D53 F70 F89 D60 F62 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [010] 018 ; H0022 H0011 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; G0317 G0271 G0260 G0022 D01 D12 D10 D26 D51 D53 D59 D84 F36 F35 D60 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [011] 018 ; ND03 ; B9999 B3407 B3383 B3372 ; Q9999 Q8004 Q7987 ; Q9999 Q9370 ; N9999 N6780-R N6655 ; N9999 N6177-R ; Q9999 Q6768 Q6702 ; Q9999 Q6995-R ; Q9999 Q8344 Q8264 ; K9676-R ; K9483-R ; B9999 B4706-R B4568 ; B9999 B4682 B4568 ;
- A04 - [001] 018 ; R00444 G0453 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F70 F93 ; R00446 G0282 G0271 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D60 D83 F36 F35 ; H0022 H0011 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; P0088 ;
- [002] 018 ; N9999 N6439 ; N9999 N6939-R ; N9999 N6860 N6655 ;

N9999 N6144 ;
- [003] 018 ; ND03 ; B9999 B3407 B3383 B3372 ; Q9999 Q8004 Q7987 ;
Q9999 Q9370 ; N9999 N6780-R N6655 ; N9999 N6177-R ; Q9999 Q6768
Q6702 ; Q9999 Q6995-R ; Q9999 Q8344 Q8264 ; K9676-R ; K9483-R ;
B9999 B4706-R B4568 ; B9999 B4682 B4568 ;
- [004] 018 ; A999 A157-R ;
A05 - [001] 018 ; R01176 G1650 G1649 D01 D23 D22 D31 D41 D50 D73 D82 F08
F07 F97 ; A999 A782 ; A999 A157-R ; H0000 ; P1116 P1105 Du1 D10
F07 ;

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